

### ABSTRACT

[0082] An apparatus and method for secure, automated response to distributed denial of service (DDoS) attacks are described. The method includes notification of a DDoS attack received by an Internet host. Once received by an Internet host, the Internet host establishes security authentication from an upstream router from which the attack traffic, transmitted by one or more host computers, is received. The Internet host then transmits filter(s) to the upstream router generated based upon characteristics of the attack traffic. Once installed by the upstream router, the attack traffic is dropped to terminate a DDoS attack. In addition, the router may determine upstream router(s) coupled to ports from which attack traffic is received, and securely forward the filter(s) to the upstream routers as a routing protocol updated in order to drop the attack traffic at a point closer to a source of the DDoS attack.